TITLE VI DATA COLLECTION

WHY DO WE NEED DATA?

It's Required

- States must provide for such methods of administration . . . to give reasonable guarantee of compliance. 49 C.F.R. §21.7(b).
- States must collect statistical data on affected persons. 23 C.F.R. § 200.9(b)(4).
- Recipients collect and make available to FHWA racial and ethnic data showing effects of programs and activities. 49 C.F.R. § 21.9(b).
- Internal and external program reviews. 23 C.F.R. § 200.9(b)(5), (7).

WHY DO WE NEED DATA?

Can we ask people for or otherwise collect demographic information? Isn't that prohibited?

You can. You must.

49 C.F.R. §21.7(b)

49 C.F.R. § 21.9(b)

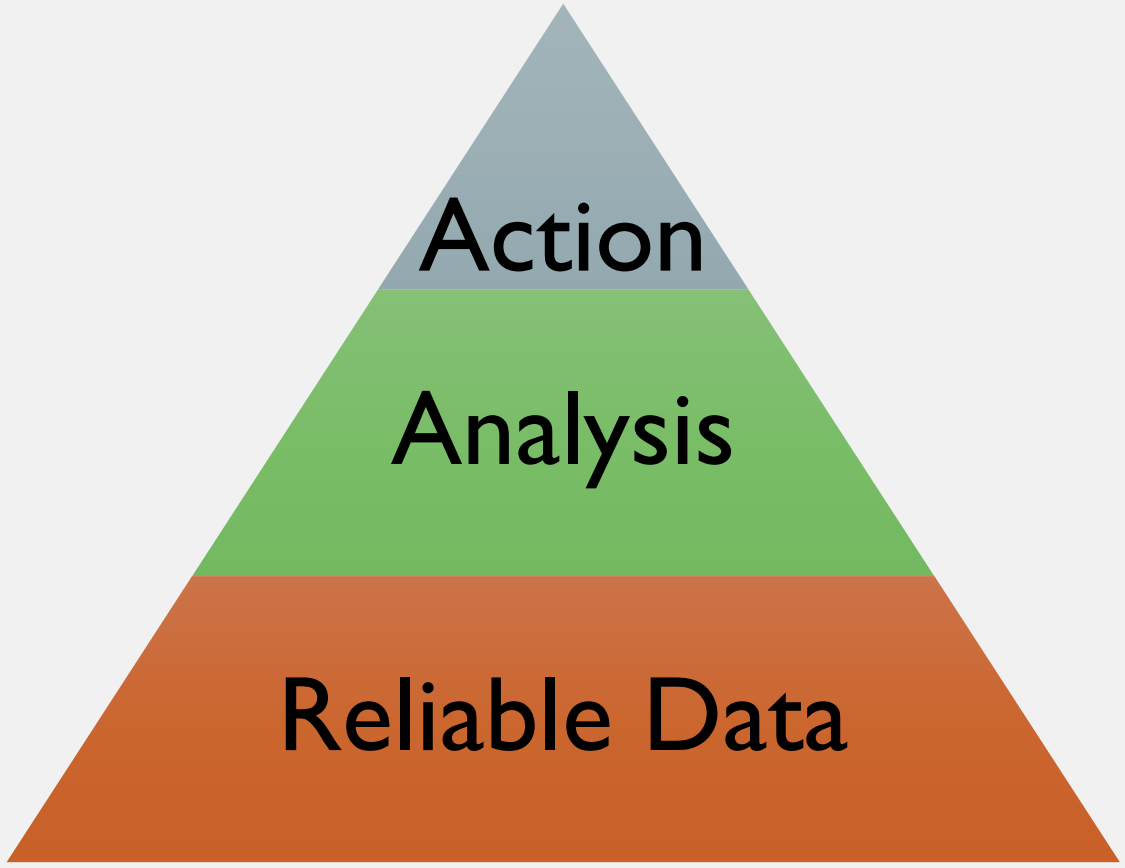
- 23 C.F.R. § 200.9(b)(4)
- 23 C.F.R. § 200.9(b)(7),

23 C.F.R. § 200.9(b)(5),

WHY DO WE NEED DATA?

It's a Good Idea

- Data is the foundation for disparate impact analysis.
- Demographic data is crucial, but it must be paired with other information on impacts.
- Systematic reviews require more than one year of study.



HOW DO WE USE DATA?

- Title VI analysis involves pairing two things:

  Demographics + **Impact or Benefit**

- For example:
  1. Decennial Census + Noise Impacted Residences
  2. ACS + Vital Documents to be Translated
  3. Relocatee Demographic Surveys + Relocation Financial Data
  4. Public Meeting Attendees + Overall Area Population

WHERE DO WE FIND THE DATA?

1. Demographic
   - U.S. Census – ACS and Decennial
   - Other public sources
   - Surveys – written or visual
2. Financial
3. Other Sources

DEMOGRAPHIC DATA – US CENSUS PRODUCTS

- Differences between the Decennial (10-year) Census and the ACS:

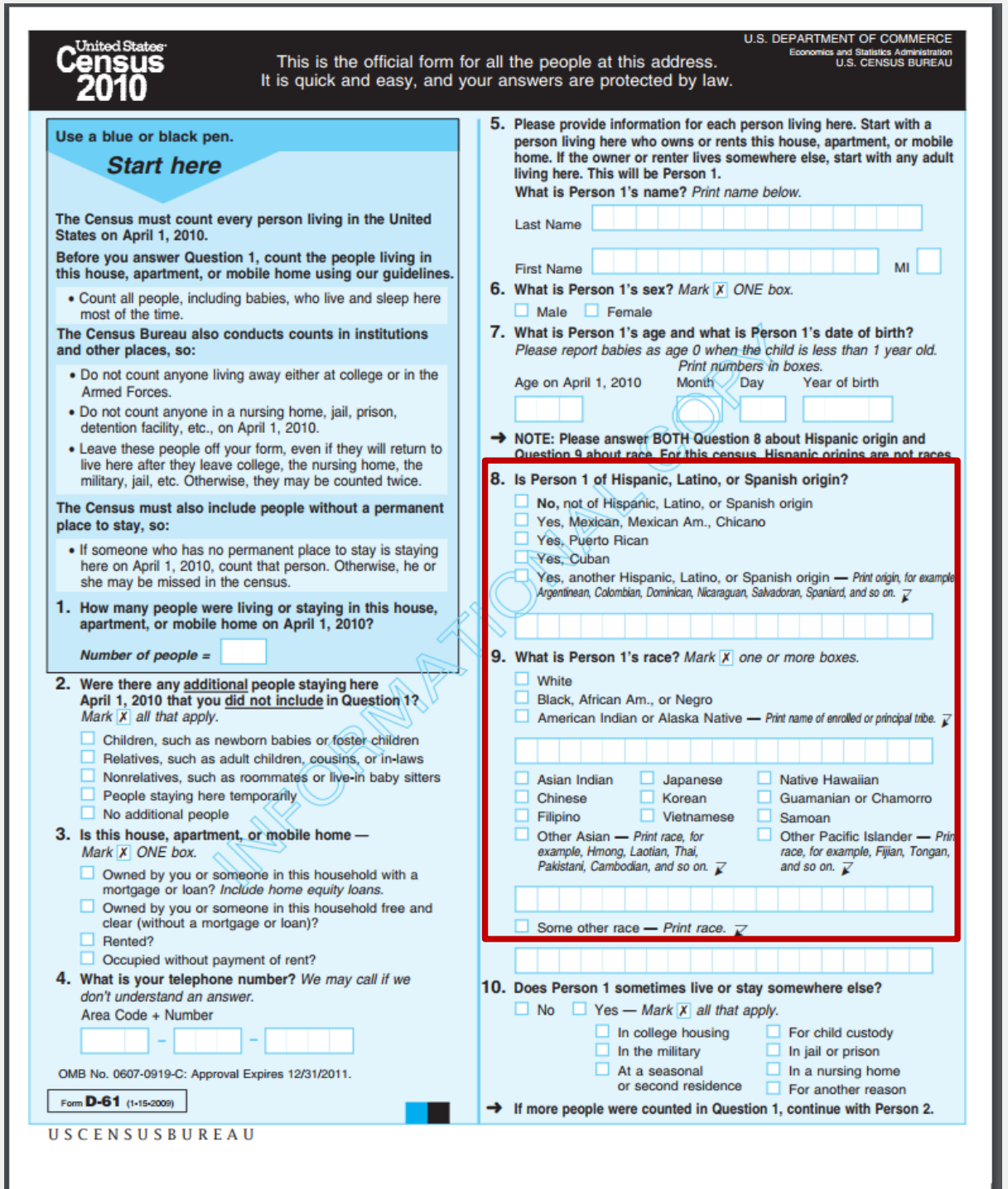
	Decennial Census	American Community Survey
When?	Every 10 Years	Every Year – Aggregated every 5 year period
How long?	Short	Long
Who?	Completed for every person in every household	Completed through a random sample of households
What?	Primarily measures total population	Measures socio-economic characteristics

AMERICAN COMMUNITY SURVEY

Distinguishing features of ACS 1-year, 1-year supplemental, 3-year, and 5-year estimates

1-year estimates	1-year supplemental estimates	3-year estimates*	5-year estimates
12 months of collected data *Example:* 2015 ACS 1-year estimates *Date collected between:* January 1, 2015 and December 31, 2015	12 months of collected data *Example:* 2015 ACS 1-year supplemental estimates *Date collected between:* January 1, 2015 and December 31, 2015	36 months of collected data *Example:* 2011-2013 ACS 3-year estimates *Date collected between:* January 1, 2011 and December 31, 2013	60 months of collected data *Example:* 2011-2015 ACS 5-year estimates *Date collected between:* January 1, 2011 and December 31, 2015
Data for areas with populations of 65,000+	Data for areas with populations of 20,000+	Data for areas with populations of 20,000+	Data for all areas
Smallest sample size	Smallest sample size	Larger sample size than 1-year	Largest sample size
Less reliable than 3-year or 5-year	Less reliable than 5-year	More reliable than 1-year; less reliable than 5-year	Most reliable
Most current data	Most current data	Less current than 1-year estimates; more current than 5-year	Least current
Annually released: 2005-present	Annually released: 2014-present	Annually released: 2007-2013	Annually released: 2009-present
Best used when	**Best used when**	**Best used when**	**Best used when**
Currency is more important than precision Analyzing large populations	Currency is more important than precision Analyzing smaller populations Examining smaller geographies because the standard 1-year estimates are not available	More precise than 1-year, spans fewer years than 5-year Analyzing smaller populations Examining smaller geographies because the standard 1-year estimates are not available	Precision is more important than currency Analyzing very small populations Examining tracts and other smaller geographies because 1-year estimates are not available

DECENNIAL CENSUS



United States Census 2010

This is the official form for all the people at this address.
It is quick and easy, and your answers are protected by law.

U.S. DEPARTMENT OF COMMERCE
Economics and Statistics Administration
U.S. CENSUS BUREAU

Use a blue or black pen.

Start here

The Census must count every person living in the United States on April 1, 2010.

Before you answer Question 1, count the people living in this house, apartment, or mobile home using our guidelines.

- Count all people, including babies, who live and sleep here most of the time.

The Census Bureau also conducts counts in institutions and other places, so:

- Do not count anyone living away either at college or in the Armed Forces.
- Do not count anyone in a nursing home, jail, prison, detention facility, etc., on April 1, 2010.
- Leave these people off your form, even if they will return to live here after they leave college, the nursing home, the military, jail, etc. Otherwise, they may be counted twice.

The Census must also include people without a permanent place to stay, so:

- If someone who has no permanent place to stay is staying here on April 1, 2010, count that person. Otherwise, he or she may be missed in the census.

1. How many people were living or staying in this house, apartment, or mobile home on April 1, 2010?

Number of people =

2. Were there any additional people staying here April 1, 2010 that you did not include in Question 1? *Mark ☒ all that apply.*

- ☐ Children, such as newborn babies or foster children
- ☐ Relatives, such as adult children, cousins, or in-laws
- ☐ Nonrelatives, such as roommates or live-in baby sitters
- ☐ People staying here temporarily
- ☐ No additional people

3. Is this house, apartment, or mobile home — *Mark ☒ ONE box.*

- ☐ Owned by you or someone in this household with a mortgage or loan? *Include home equity loans.*
- ☐ Owned by you or someone in this household free and clear (without a mortgage or loan)?
- ☐ Rented?
- ☐ Occupied without payment of rent?

4. What is your telephone number? *We may call if we don't understand an answer.*

Area Code + Number

OMB No. 0607-0919-C: Approval Expires 12/31/2011.

Form **D-61** (1-15-2009)

5. Please provide information for each person living here. Start with a person living here who owns or rents this house, apartment, or mobile home. If the owner or renter lives somewhere else, start with any adult living here. This will be Person 1.

What is Person 1's name? *Print name below.*

Last Name

First Name MI

6. What is Person 1's sex? *Mark ☒ ONE box.*

☐ Male ☐ Female

7. What is Person 1's age and what is Person 1's date of birth?

Please report babies as age 0 when the child is less than 1 year old.

Print numbers in boxes.

Age on April 1, 2010 | Month | Day | Year of birth

→ **NOTE: Please answer BOTH Question 8 about Hispanic origin and Question 9 about race. For this census, Hispanic origins are not races.**

8. Is Person 1 of Hispanic, Latino, or Spanish origin?

- ☐ **No,** not of Hispanic, Latino, or Spanish origin
- ☐ Yes, Mexican, Mexican Am., Chicano
- ☐ Yes, Puerto Rican
- ☐ Yes, Cuban
- ☐ Yes, another Hispanic, Latino, or Spanish origin — *Print origin, for example Argentinean, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on.*

9. What is Person 1's race? *Mark ☒ one or more boxes.*

- ☐ White
- ☐ Black, African Am., or Negro
- ☐ American Indian or Alaska Native — *Print name of enrolled or principal tribe.*
- ☐ Asian Indian
- ☐ Japanese
- ☐ Native Hawaiian
- ☐ Chinese
- ☐ Korean
- ☐ Guamanian or Chamorro
- ☐ Filipino
- ☐ Vietnamese
- ☐ Samoan
- ☐ Other Asian — *Print race, for example, Hmong, Laotian, Thai, Pakistani, Cambodian, and so on.*
- ☐ Other Pacific Islander — *Print race, for example, Fijian, Tongan, and so on.*
- ☐ Some other race — *Print race.*

10. Does Person 1 sometimes live or stay somewhere else?

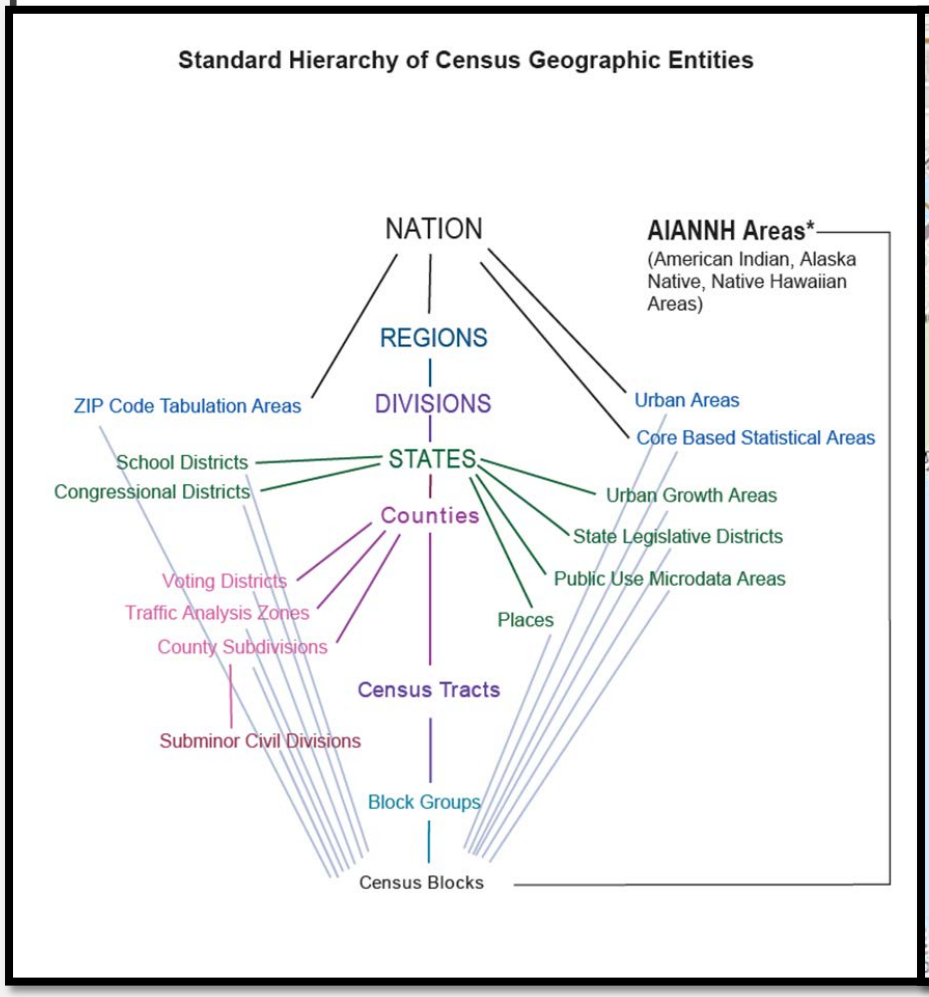
☐ No ☐ Yes — *Mark ☒ all that apply.*

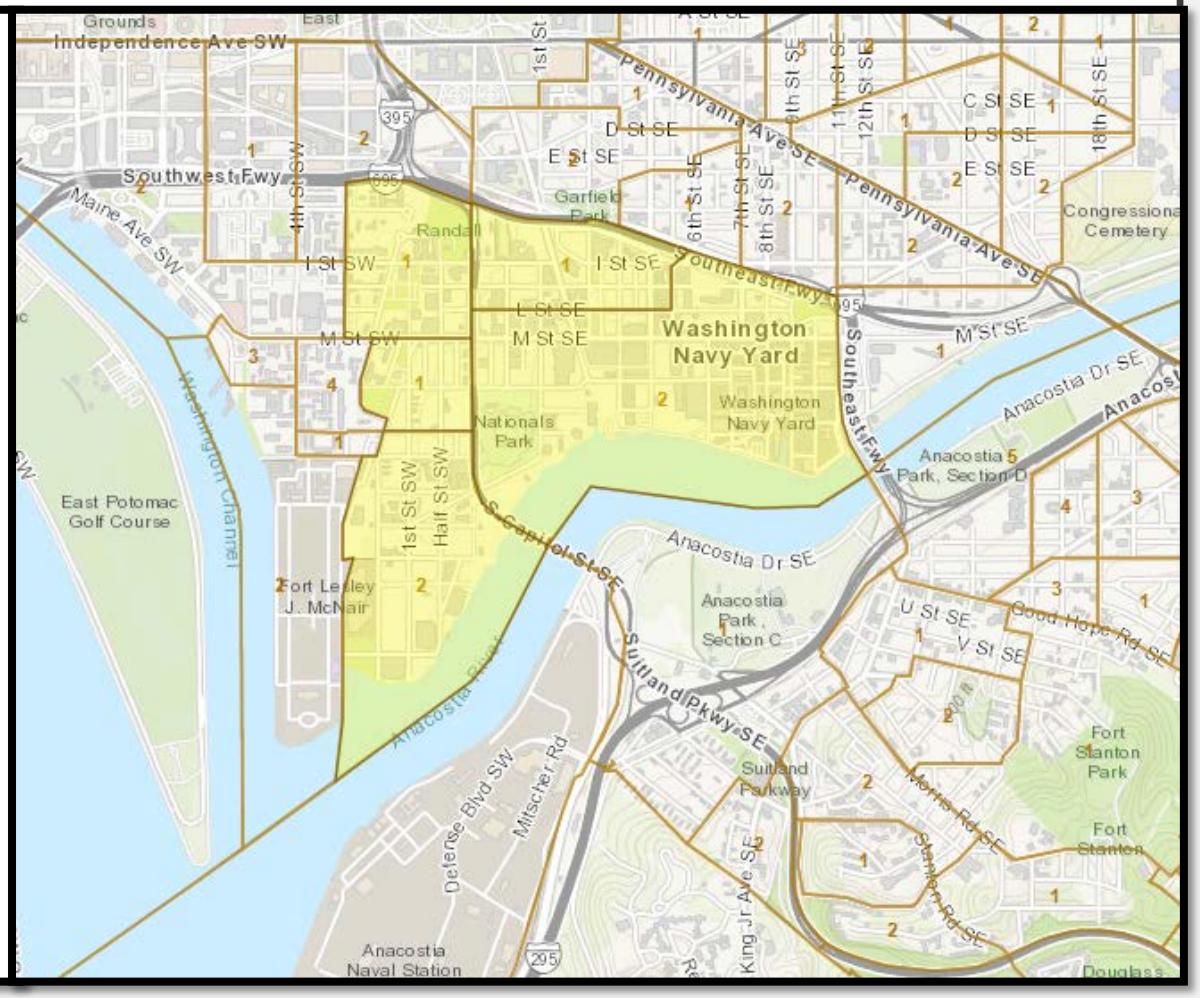
- ☐ In college housing
- ☐ In the military
- ☐ At a seasonal or second residence
- ☐ For child custody
- ☐ In jail or prison
- ☐ In a nursing home
- ☐ For another reason

→ **If more people were counted in Question 1, continue with Person 2.**

USCENSUSBUREAU

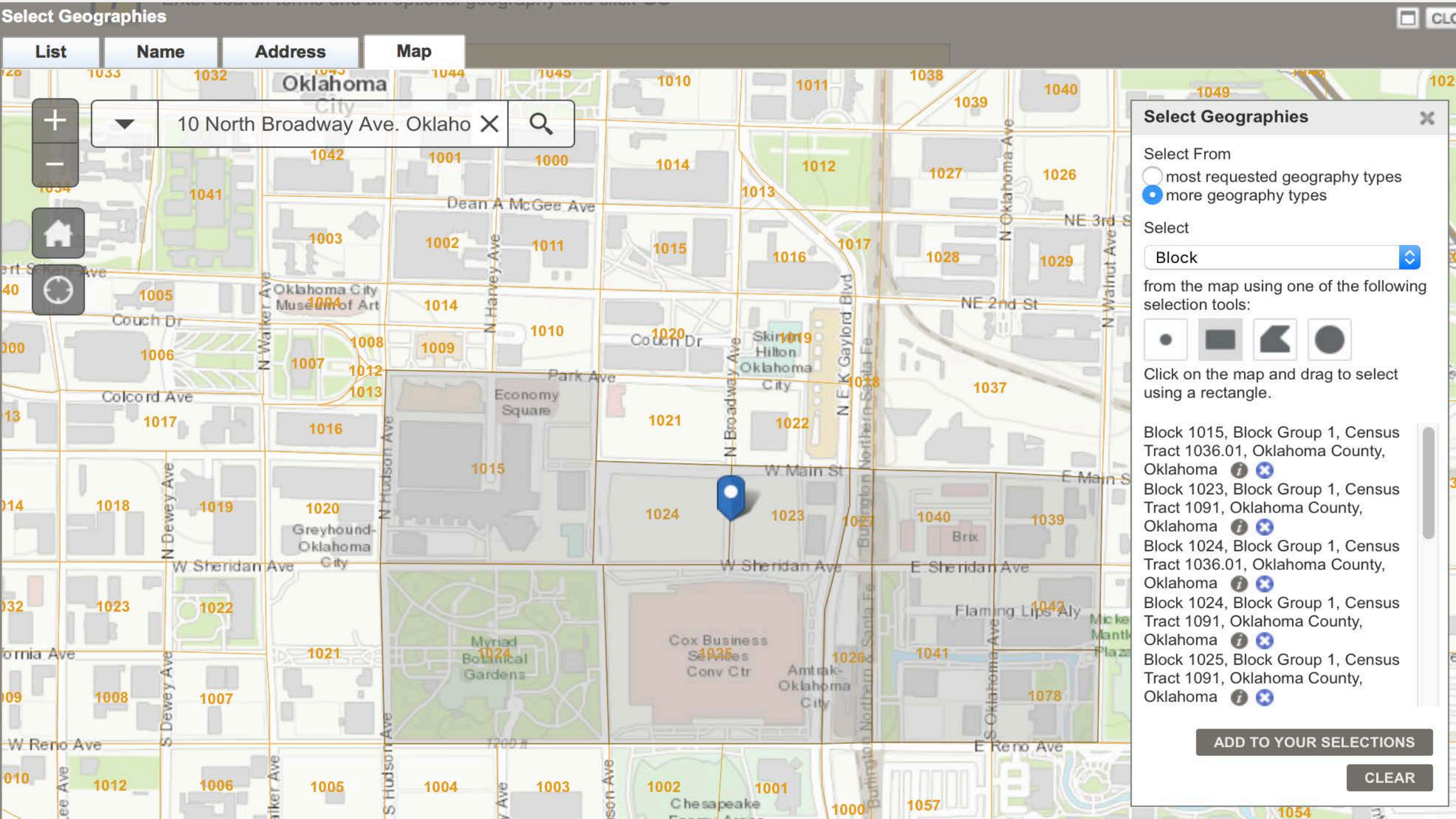
CENSUS GEOGRAPHIES

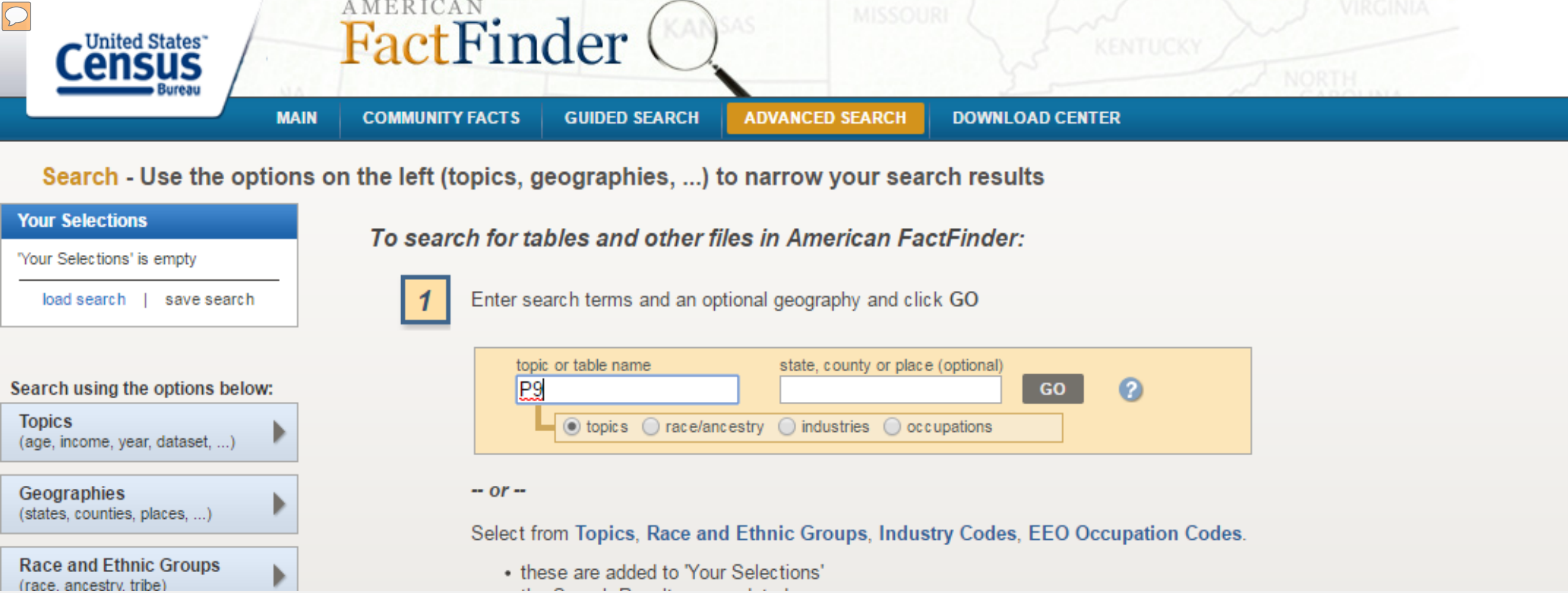




CENSUS GEOGRAPHIES

Geographical Unit	Geographic Properties	Approximate Population Size
Tract	• Area roughly equivalent to a large neighborhood below city/county level	• Between 1,200 and 8,000 people, with 4,000 considered optimum
Block Group	• Each tract contains at least one BG • Smallest unit of measure for ACS	• Between 600 and 3,000 people, with 1,500 considered optimum
Block	• Smallest area unit, but large variation. No smaller than 30k square feet, but some very large in unpopulous areas • Large variation in population. • Size can change between decennial Census'	• Between 0 and 600 people.


Select Geographies
List
Name
Address
Map
10 North Broadway Ave. Oklaho
Select Geographies
Select From
most requested geography types
more geography types
Select
Block
from the map using one of the following selection tools:
Click on the map and drag to select using a rectangle.
Block 1015, Block Group 1, Census Tract 1036.01, Oklahoma County, Oklahoma
Block 1023, Block Group 1, Census Tract 1091, Oklahoma County, Oklahoma
Block 1024, Block Group 1, Census Tract 1036.01, Oklahoma County, Oklahoma
Block 1024, Block Group 1, Census Tract 1091, Oklahoma County, Oklahoma
Block 1025, Block Group 1, Census Tract 1091, Oklahoma County, Oklahoma
ADD TO YOUR SELECTIONS
CLEAR
Oklahoma City
Dean A McGee Ave
N Harvey Ave
N Walker Ave
Oklahoma City Museum of Art
Couch Dr
Park Ave
Colcord Ave
N Hudson Ave
Economy Square
N Broadway Ave
Skirvin Hilton Oklahoma City
N E K Gaylord Blvd
N Oklahoma Ave
NE 2nd St
NE 3rd St
N Walnut Ave
W Main St
E Main St
N Dewey Ave
W Sheridan Ave
E Sheridan Ave
Greyhound-Oklahoma City
Myriad Botanical Gardens
Cox Business Services Conv Ctr
Amtrak-Oklahoma City
Flaming Lips Aly
Brix
S Dewey Ave
S Hudson Ave
S Oklahoma Ave
W Reno Ave
E Reno Ave
Chesapeake



AMERICAN FACT FINDER

- Factfinder.census.gov
- 2010 Census: Table **P9**
- 5 year ACS: Table **B03002**

AMERICAN FACT FINDER DECENNIAL TABLES

Table P9: Hispanic or Latino, Not Hispanic or Latino by Race

- First lists Hispanic or Latino population
- Next lists "Not Hispanic or Latino" populations
- Then lists Not Hispanic or Latino, "Two or More Races" for up to 5 races

	Block 1015, Block Group 1, Census Tract 1036.01, Oklahoma County, Oklahoma	Block 1024, Block Group 1, Census Tract 1036.01, Oklahoma County, Oklahoma	Bloc Block Cens 1 Okl Co Okl
Total:	0	0	
Hispanic or Latino	0	0	
Not Hispanic or Latino:	0	0	
Population of one race:	0	0	
White alone	0	0	
Black or African American alone	0	0	
American Indian and Alaska Native alone	0	0	
Asian alone	0	0	
Native Hawaiian and Other Pacific Islander alone	0	0	
Some Other Race alone	0	0	
Two or More Races:	0	0	
Population of two races:	0	0	

AMERICAN FACT FINDER ACS TABLES

Table B03002: Hispanic or Latino Origin by Race, 5-Year Estimates

- Same Race/Ethnicity structure as table P9
- Notice the column for "Margin of Error." The ACS is sample (3.5m people out of 318m total). Census uses a 90% confidence level by default for this MOE.
- ACS is where Limited English Proficiency is found

	United States	
	Estimate	Margin of Error
Total:	318,558,162	*****
Not Hispanic or Latino:	263,359,055	+/-1,247
White alone	197,362,672	+/-9,264
Black or African American alone	39,098,319	+/-31,527
American Indian and Alaska Native alone	2,084,326	+/-6,921
Asian alone	16,425,317	+/-20,829
Native Hawaiian and Other Pacific Islander alone	508,924	+/-4,307
Some other race alone	676,003	+/-10,701
Two or more races:	7,203,494	+/-49,256
Two races including Some other race	292,190	+/-6,275
Two races excluding Some other race, and three or more races	6,911,304	+/-46,644
Hispanic or Latino:	55,199,107	+/-1,240
White alone	36,294,406	+/-50,624
Black or African American alone	1,143,499	+/-18,538
American Indian and Alaska Native alone	513,491	+/-11,644
Asian alone	189,308	+/-6,112
Native Hawaiian and Other Pacific Islander alone	51,097	+/-2,951
Some other race alone	14,457,853	+/-81,802
Two or more races:	2,549,453	+/-37,656

ACS – LIMITED ENGLISH PROFICIENCY

Table B16001: Language Spoken at Home by Ability to Speak English for the Population 5 Years and Over, 5-Year Estimates

- Divides data into whether persons speak English "very well" or "less than very well." The latter is our useful category.
- ACS Margin of Error
- Large number of languages captured, but may need to supplement

	Oklahoma City city, Oklahoma	
	Estimate	Margin of Error
Total:	562,458	+/-840
Speak only English	449,081	+/-2,144
Spanish or Spanish Creole:	83,021	+/-1,798
Speak English "very well"	40,493	+/-1,418
Speak English less than "very well"	42,528	+/-1,302
French (incl. Patois, Cajun):	1,322	+/-328
Speak English "very well"	1,130	+/-302
Speak English less than "very well"	192	+/-92
French Creole:	90	+/-72
Speak English "very well"	67	+/-66
Speak English less than "very well"	23	+/-28
Italian:	90	+/-54
Speak English "very well"	70	+/-53
Speak English less than "very well"	20	+/-22
Portuguese or Portuguese Creole:	171	+/-88
Speak English "very well"	106	+/-60
Speak English less than "very well"	65	+/-66
German:	992	+/-195
Speak English "very well"	858	+/-185
Speak English less than "very well"	134	+/-75
Yiddish:	0	+/-22
Speak English "very well"	0	+/-22
Speak English less than "very well"	0	+/-22
Other West Germanic languages:	52	+/-37
Speak English "very well"	52	+/-37

CENSUS DATA INTERPRETATION

A few tips on interpreting the Census

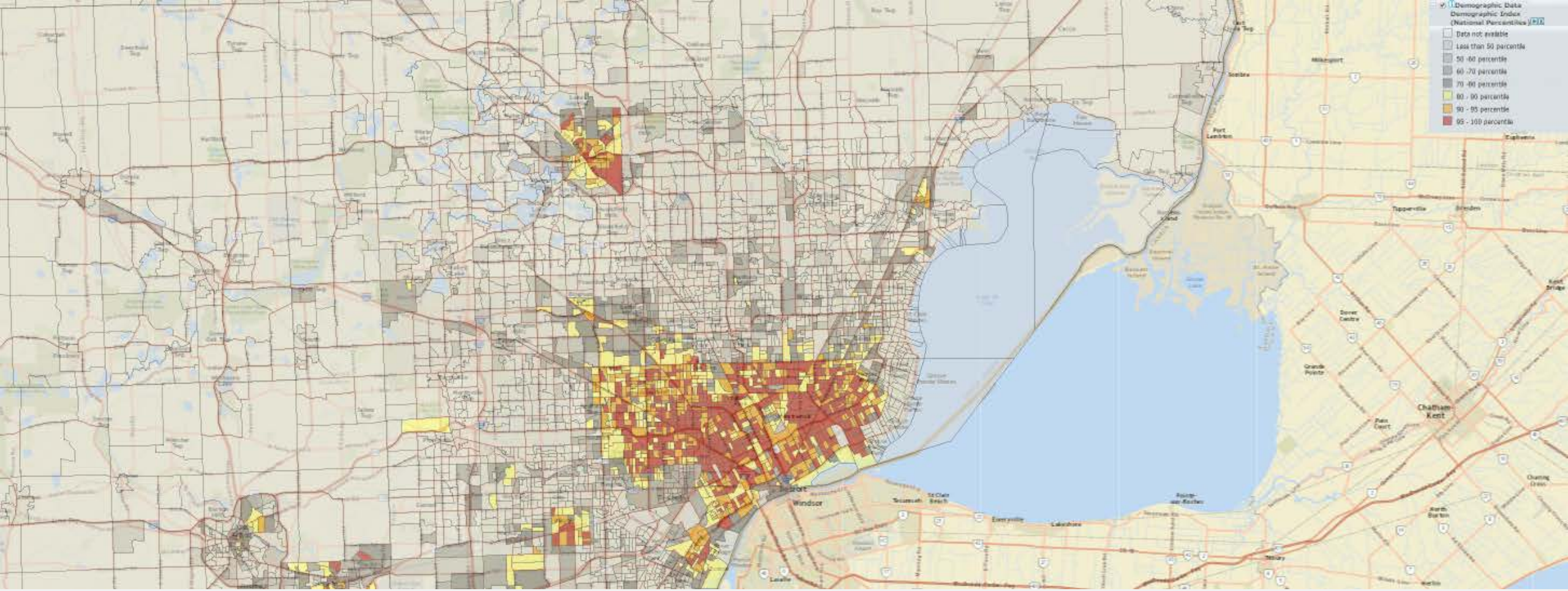
- Title VI analysis regards each population on its own. Some sources (E.g. EJ Screen) allow for aggregation of all "minority" groups.
- Advise using the Decennial Census as starting point for head count.
- If the data is gathered/summarized by someone else, check the source and the methods.
- Blocks can contain 0 – 600 people, and comparing blocks to one another on a heat map is not advisable.

CENSUS-BASED MAPS

- NY TIMES
- UVA DOT MAP
- EJSCREEN
- OTHER RESOURCES

CENSUS-BASED MAPS

Two main types of population maps:	
1. Heat (choropleth) maps	• Useful for one population category at a time • Not as useful for block-level data
2. Dot-density maps	• Useful for multiple population categories at once • "Self-normalizing," so population size, density, and comparative map coloring easy to understand and not misleading

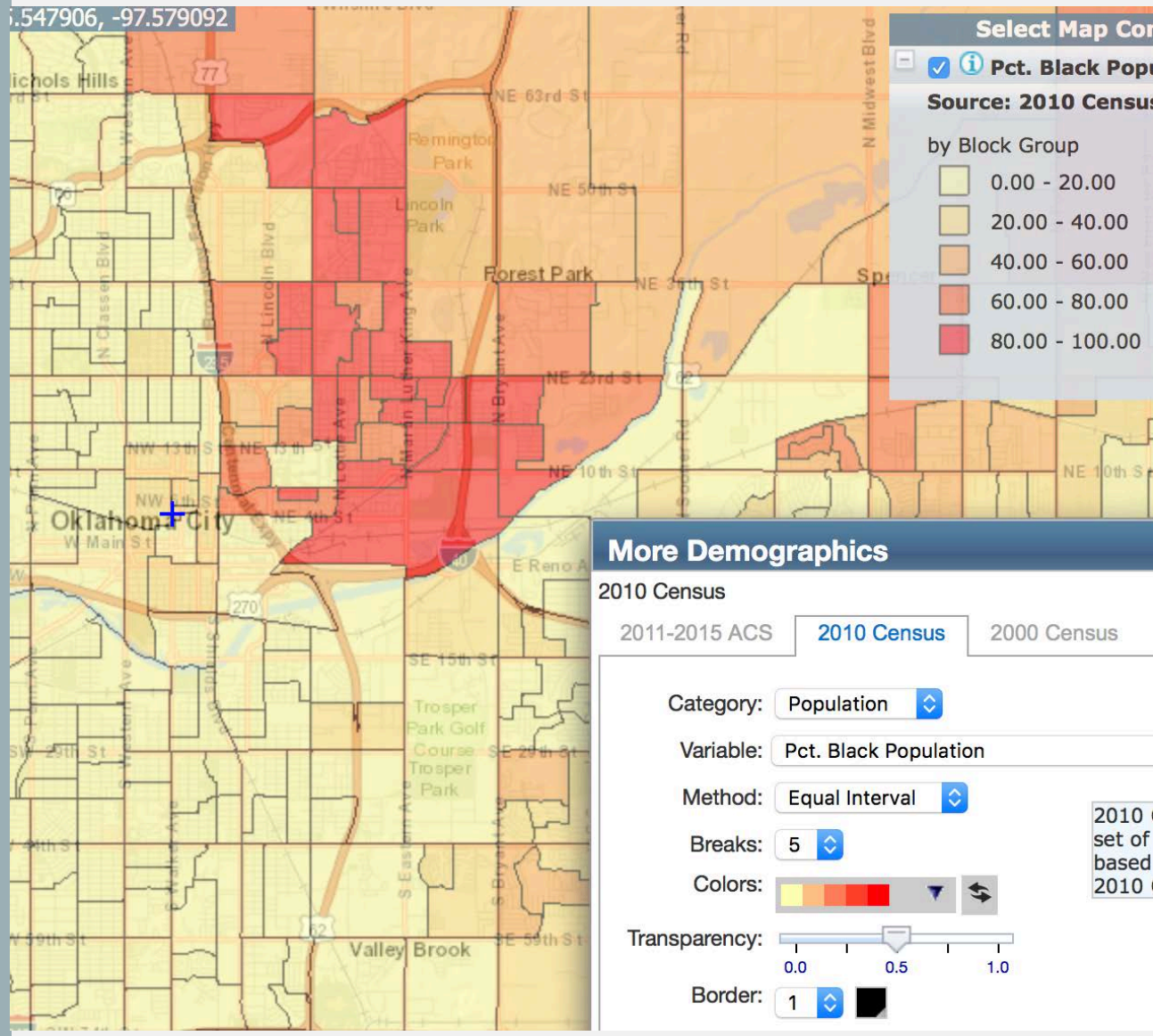


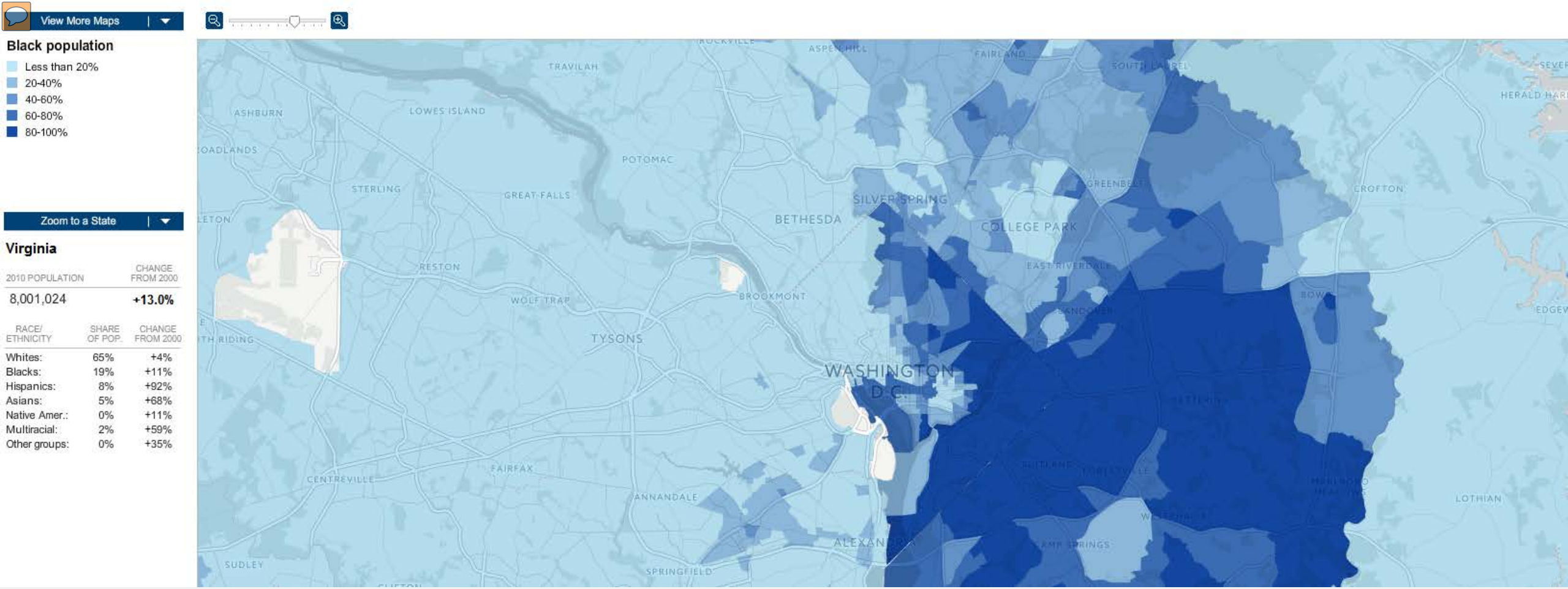
EJSCREEN

HTTPS://EJSCREEN.EPA.GOV/MAPPER/

EJ SCREEN

- 2010 and 2000 Decennial Census, 2011-2015 ACS
- Heat maps with many view options. Not fast.
- Geography type based on zoom level.
- Useful for choropleth maps of all kinds



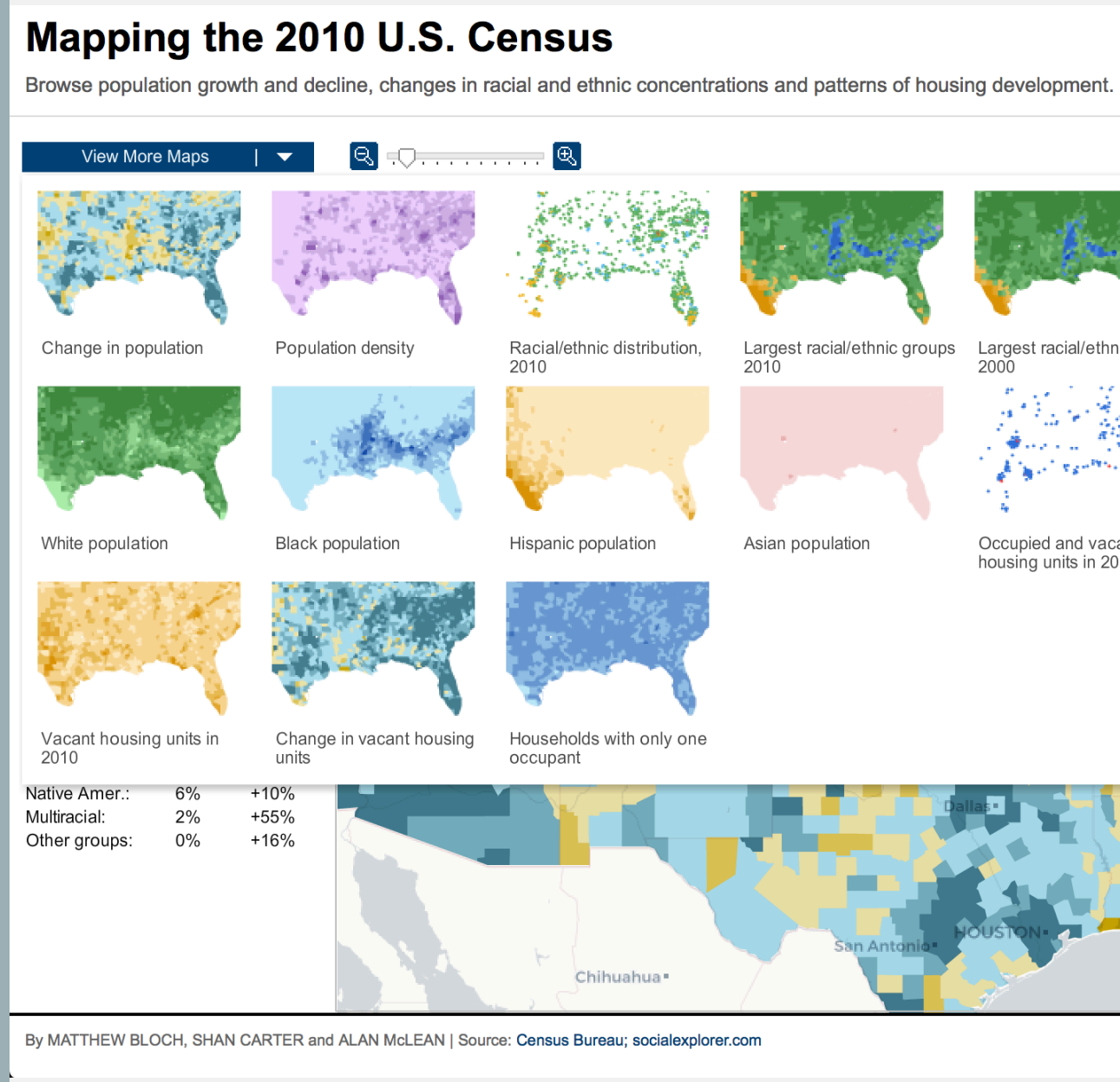


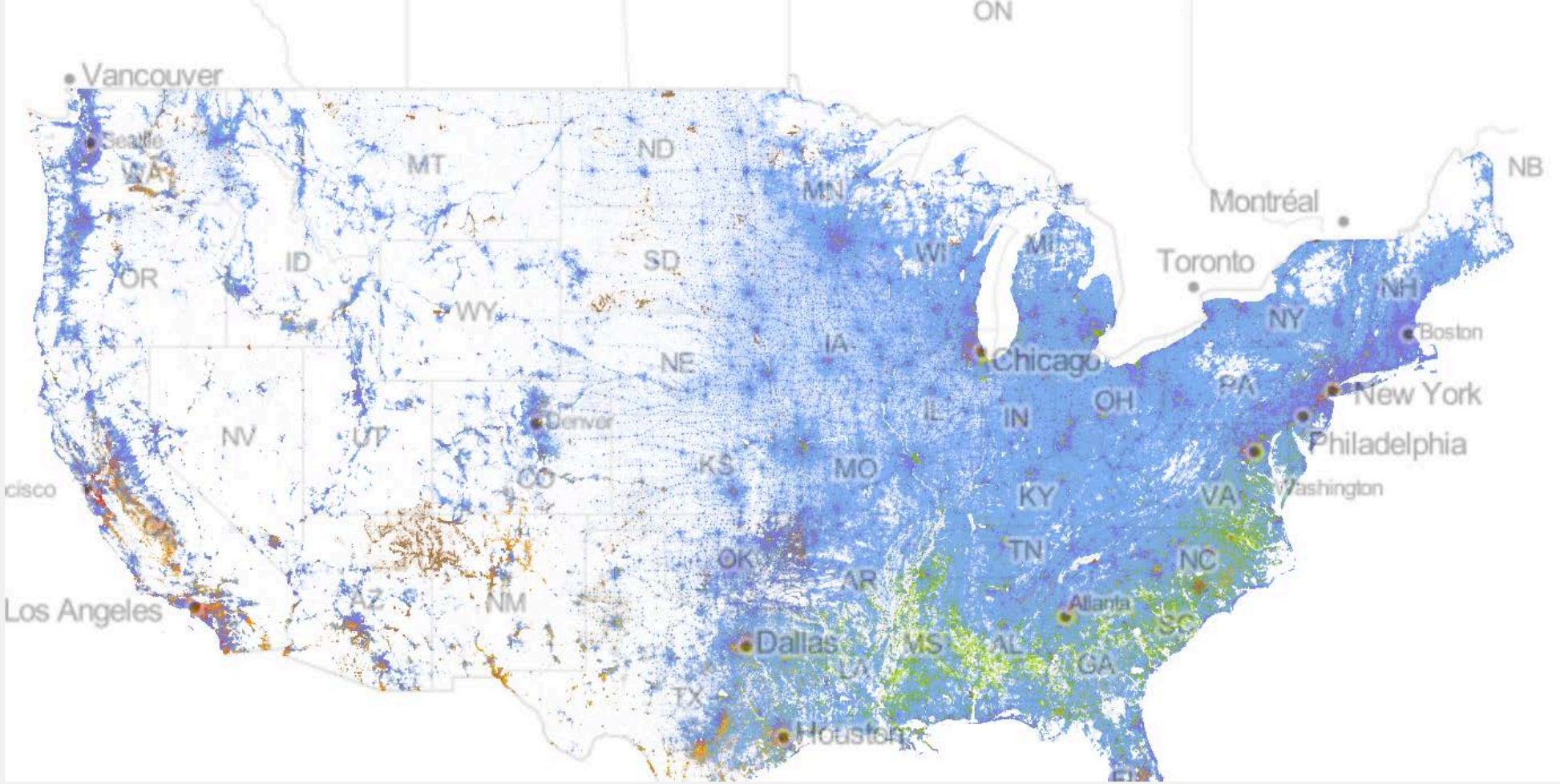
NYTIMES 2010 CENSUS MAP

HTTP://WWW.NYTIMES.COM/PROJECTS/CENSUS/2010/MAP.HTML

NYTIMES 2010 CENSUS MAP

- 2010 Decennial Data
- Flexible, fast heat and dot density maps
- Limited to Tract Level. Dot map maximum zoom is 1 dot / 25 people
- Useful for a quick survey



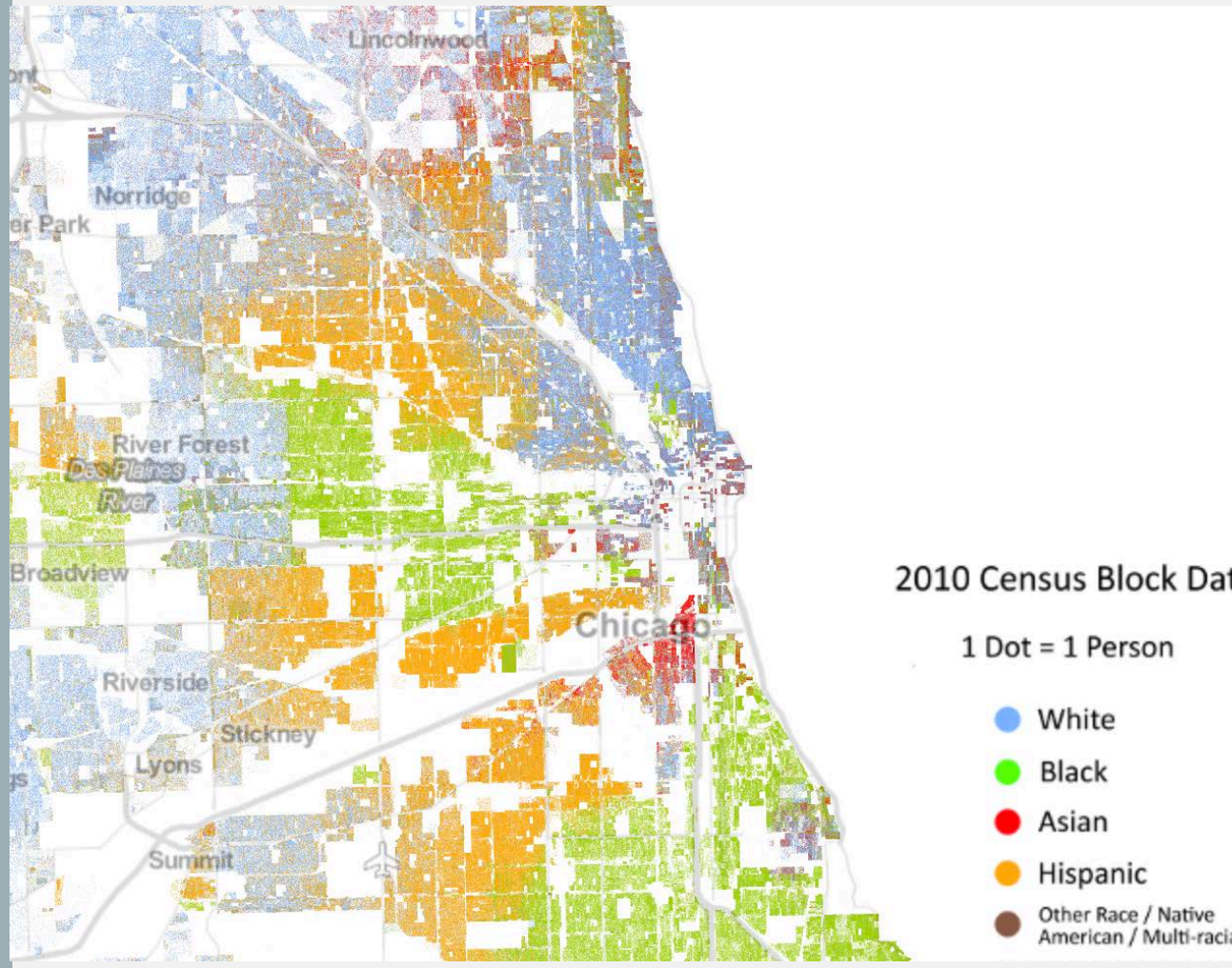


UNIVERSITY OF VIRGINIA RACIAL DOT MAP

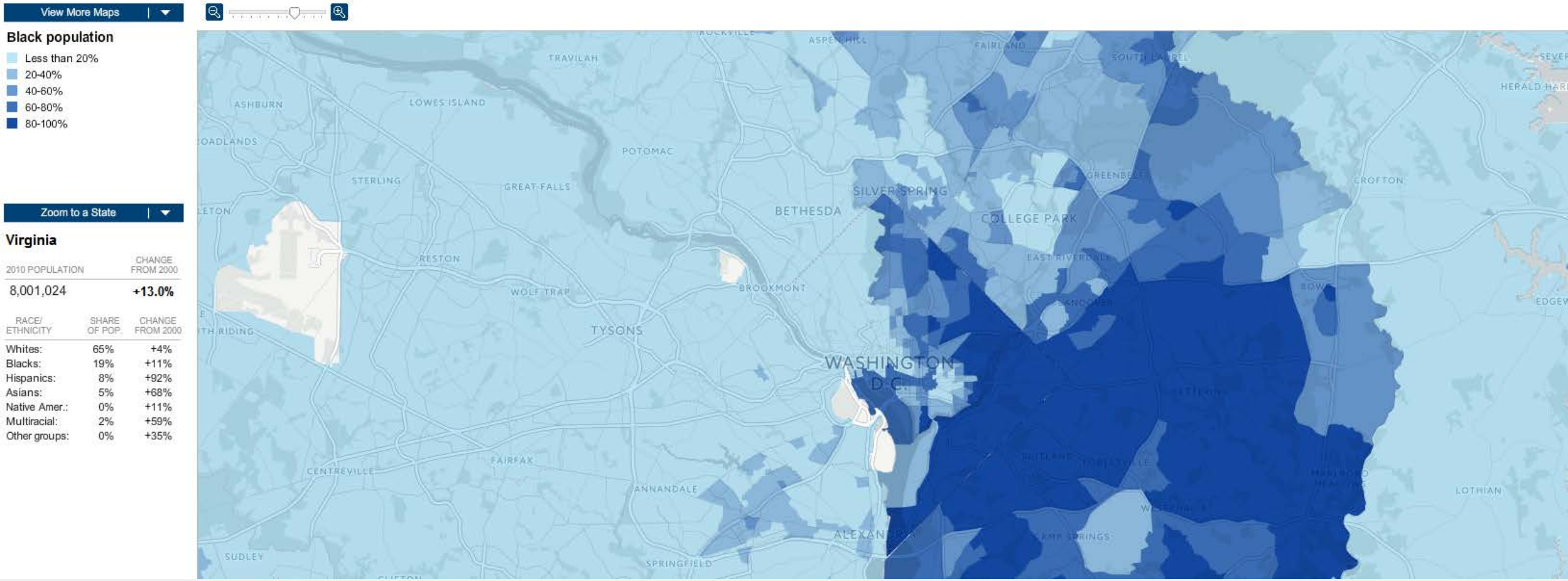
HTTPS://DEMOGRAPHICS.VIRGINIA.EDU/DOTMAP/

UVA RACIAL DOT MAP

- 2010 Decennial Data
- Fast dot density maps
- Measures block-level data. Dot map maximum zoom is 1 dot / 25 people
- Zoom level may be limiting
- Useful for a quick survey



Source code available on GitHub

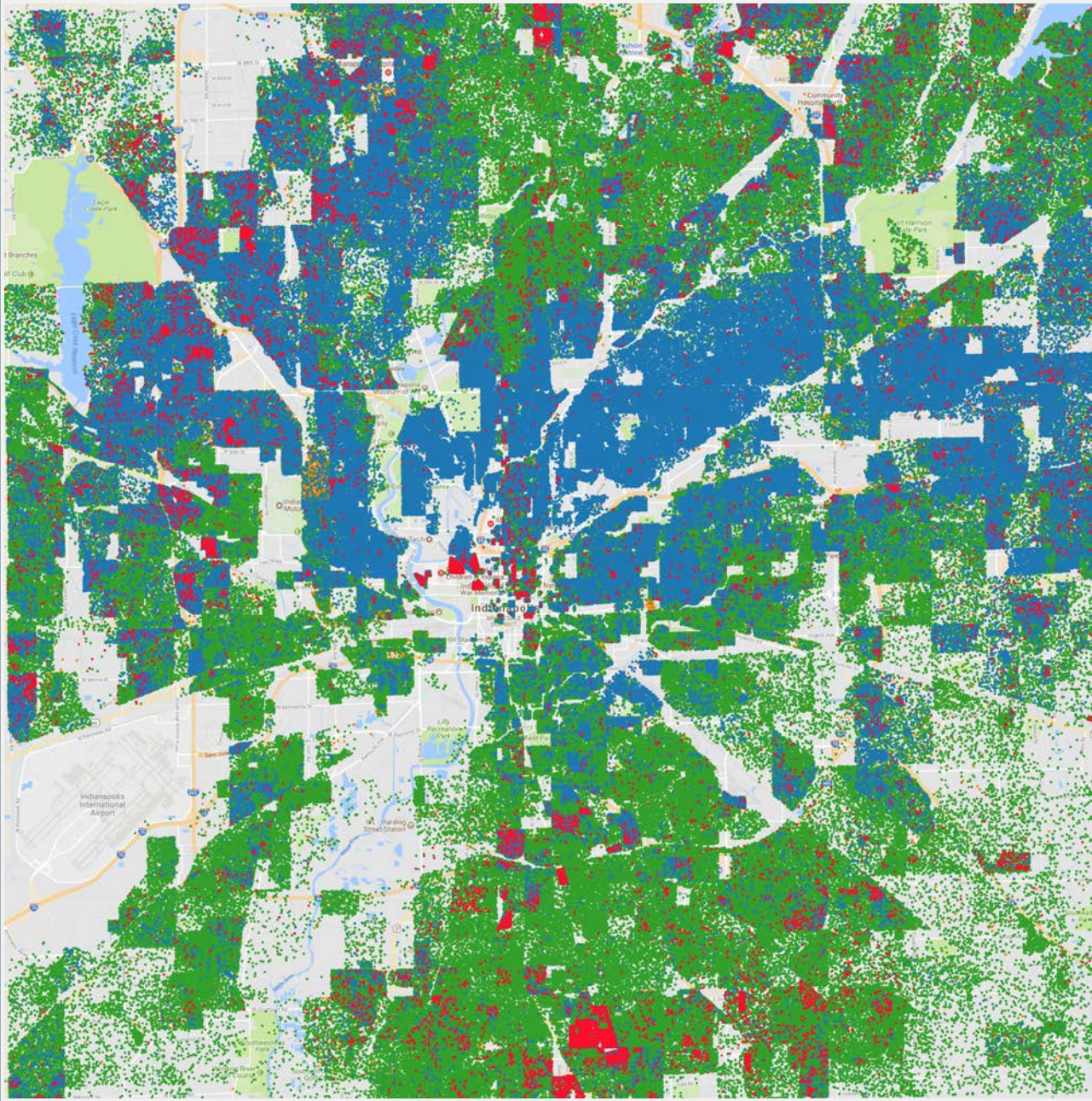


SOFTWARE MAP EXAMPLE - QGIS

HTTPS://QGIS.ORG/EN/SITE/

GIS SOFTWARE MAP EXAMPLE - QGIS

- Free Geographic Information System (GIS) software. States and local entities will often use other licensed software such as ArcGIS.
- Most GIS software can create heat and dot maps.
- Maximum flexibility. Easy with practice.



DEMOGRAPHIC SURVEYS

Surveys are necessary when:

1. Demographic data isn't available through the Census. E.g. LEP data at block level, particular national origins

2. You need to know demographics for a particular event or action. E.g. public meeting attendees

DEMOGRAPHIC SURVEYS

Some things to consider:

- Does your State collect demographic survey responses during key state actions? E.g. ROW, public involvement, NEPA.
- How is race and ethnicity categorized?
- Are you meeting people "where they are?"
- Once the data is received, what does the agency do with it?

OTHER SOURCES

Examples	
1. Finance Systems	Analyzing distribution of projects or program benefits per population
2. Relocation Data	Analyzing disparities in right-of-way / relocation benefits among demographic groups
3. Prequalification Data	Analyzing distribution of contracts among race / ethnicity of ownership
4. NEPA Documents	Analyzing a variety of specific project impacts on different populations, including air quality, noise, and impacts by project alternative.

OTHER SOURCES

Where are you data rich? Where are you poor?

When you contact the public…

When you directly increase their noise levels…

When you relocate them…

When you contract with their businesses…

When you reroute their pedestrian paths…

…when you affect the public…

…do you know anything about them?

THANK YOU